

Helio Henrique Lopes Costa Monte-Alto

Software Engineer

[www.linkedin.com/in/helio-henrique-l-c-monte-al](http://www.linkedin.com/in/helio-henrique-l-c-monte-alto-6b963722/)

[to-6b963722/](https://github.com/helioh2)

github.com/helioh2

Palotina-PR, Brazil

heliohenrique3@gmail.com

+55 44 999627670

WORK EXPERIENCE

Software Analyst (Developer), HSBC Global Technology - *Jul/2013 - Jul/2014* - Curitiba, PR - Brazil

- I was a Full Stack Developer, focused on Java, using an Agile methodology in a global team.
- I worked on a project called Client Docs, implementing new functionalities and fixing bugs in a multi-tier architecture software. I have worked both on the back-end and front-end.
- I used Test-Driven Development, getting some experience with unit testing using JUnit.
- I mainly developed using Spring Framework and Hibernate for Java, but also eventually developed in Javascript/JQuery in the front-end, as well as with PL/SQL (Oracle) scripts and batch processes for Data Fix and Data Load in the back-end.
- Used some interesting tools like Rational Application Developer, Rational Team Concert (version control and management of tasks, revision control, build management, and reports), Maven (dependency management) and Sonar (QA tool for static verification of code).
- Took part on the daily deployment of the application in a Websphere Application Server.

Assistant Professor, Federal University of Paraná - *Aug/2014 - present* - Palotina, PR - Brazil

- I am currently a computer science professor/lecturer. The courses and topics I teach: Object-Oriented Programming, Object-Oriented Analysis and Design, Software Engineering, Web Development (always experimenting new languages

and frameworks), Functional Programming, Databases (SQL and NoSQL), Algorithms and Data Structures, Multi-Agent Systems and Semantic Technologies.

→ I like to teach hands-on classes, using ideas like Coding Dojo and Pair Programming together with my students.

SIDE PROJECTS

DiSEN - Distributed Software Engineering Environment: Java-based environment for process and project management of global software engineering teams. Developed and fixed some modules for it in my research activity at State University of Maringá.

[Twitter-like Server](#): A Twitter-like server in Java.

[Hinar.io \(Android App\)](#): A hymn book app for Android I contributed to.

[CTA Simulator](#): A traffic control simulator with strong object-oriented programming in Python.

[Madrugada Robot](#): An educational robotics application which uses Arduino, Python and the Blockly framework.

[Athena](#): A recommender system of course disciplines I contributed to. It uses PHP, Java, Prolog and fuzzy logic.

[Clients Web Example Project](#) (see branches): A project for managing clients and orders developed during a Web Development course I taught. It first uses PHP and MySQL (LAMP stack) and then it was refactored as a RESTful API and Web client using MEAN stack (MongoDB, Express, AngularJS and NodeJS).

[Ling-Blocos](#): A prototype of a Scratch-like environment for programming with blocks.

[Tetris](#) and [Tetris Message](#): A flexible Tetris in Javascript and HTML5, with a variant of Tetris for writing messages.

[Rankeables](#): Starter project of a social network, continued by my students.

[Simple To-Do List](#) in Java with Spring MVC for my Web Development course.

[Sudoku Solver](#): A solver in Python using a backtrack algorithm developed in my Programming Workshop course.

EDUCATION AND CERTIFICATES

2021 PhD in Computer Engineering, Federal University of Technology - Paraná
(ongoing)

2014 M.Sc. in Computer Science, State University of Maringá

2012 B.Sc. in Computer Science, State University of Maringá

TECHNICAL SKILLS

- Languages, frameworks and tools: Java, Java EE, JSP, JSF, Spring Framework, Python, C++, PHP, HTML, JavaScript, JQuery, Ajax, AngularJS, RESTful APIs, NodeJS, Scala, Racket/Scheme, Maven, Git, Mercurial, Eclipse, Hibernate, Junit.
- Databases: MySQL, Oracle, MongoDB.
- Ease of learning and technical improving on programming languages and technologies, due to a background on many paradigms and fundamentals.
- Eagerness to always develop better code. An appreciation for beautiful code and design.
- Good knowledge of agile methodologies (XP, Scrum), object-oriented analysis and design, software architecture, design patterns, functional programming, clean code and best development practices.
- Experience with distributed artificial intelligence (multi-agent systems) and semantic technologies research.

LANGUAGES

English - Advanced/Fluent

French - Beginner/Intermediate

Spanish - Intermediate/Advanced

Portuguese - Native